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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/977,664

10/15/2001

Robert D. Herpst

3468

26009

7590

05/11/2006

ROGER M. RATHBUN  
13 MARGARITA COURT  
HILTON HEAD ISLAND, SC 29926

EXAMINER

ALEXANDER, LYLE

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/977,664

Applicant(s)

HERPST, ROBERT D.

Examiner

Lyle A. Alexander

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20, 28 and 30-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 28 and 30-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20, 28,30-33,35-37 and 30-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims state the "substrate has not been precision optically polished". However, the specification in the last paragraph of page 5 through page 6 states the substrate is first optically polished using an optical cloth and polishing compound followed by water polishing. The specification does not teach an embodiment where the substrate is not polished.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20, 28,30-33,35-37 and 30-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague and indefinite what is intended by "... supporting substrate has not been precision optically polished". It is not known what type of material is intended. Furthermore, the specification does not teach a substrate that has not been

optically polished. See the above 35 USC 112 first paragraph rejections where it is noted the specification teach on page 5 through 6 optically polishing the substrate.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 1-20, 28,30-33,35-37,30-44 and 46-53 are rejected under 35 U.S.C. 103(a) as being unpatentable Gagnon et al. (USP 5,764,355) in view of Eden et al. (USP 4,843,030), further in view of Applicants' admitted prior art (pages 3-8 of the original specification) or Izumi (USP 4,932,780).

Gagnon et al. teach an IR sample holder made of a first material that does not transmit IR radiation having an aperture containing a second material where the sample is applied that transmits IR radiation. Column 5 lines 33+ teach the second IR transmitting material may be glass, quartz or polymeric materials.

Gagnon et al. are silent to the claimed steps of forming the composition.

Eden et al. teach in column 10 lines 26+ that it is known to cleave NaCl crystal to achieve the desired size of crystal. Cleavage has the advantage of insuring separation along precise well determined orientation of the crystal.

It would have been within the skill of the art to modify Gagnon et al. and use a cleaving method to cut the crystal to gain the above advantages.

The modified sample holder of Gagnon et al. is silent to the specifically claimed glass compositions of the glass, specifically the alkali halide such as potassium bromide/chloride and sodium chloride and if the glass is unpolished.

The court decided In re Leshin (125 USPQ 416) that selection of a material based upon its suitability of intended use would have been within the skill of the art in view of 35 USC 103.

Alkali halide crystal materials comprising potassium bromide/chloride or sodium chloride are well known in the art and advantageous because of their low cost, excellent optical properties and hardness.

It would have been within the skill of the art to modify Persky et al. and use an alkali halide crystal materials comprising potassium bromide/chloride or sodium chloride to gain the above advantages and in view of Leshin because selection a material based upon its suitability of intended use.

Applicants' state on pages 3-5 it is known in the art to place sample for IR analysis in highly polished crystal cuvettes. Page 5 in the second paragraph states that it is known in the art to use both polished and unpolished crystal blanks for IR analysis. The unpolished blanks are taught as costing less to manufacture than the polished.

Izumi teach in column 2 lines 24+ polishing KBr crystal is expensive and that a high polishing is needed for wavelengths other than the IR range.

It would have been within the skill of the art to further modify the modified device of Gagnon et al. in view of Applicants' admitted prior art or Izumi and not polish the crystal to minimize the cost of production.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon et al. (USP 5,764,355) in view of Eden et al., further in view of Applicants' admitted

prior art (pages 3-8 of the original specification) or Izumi (USP 4,932,780) together further in view of Marker et al. (4,855,110)

Sée Gagnon et al. (USP 5,764,355) in view of Persky et al., further in view of Applicants' admitted prior art (pages 3-8 of the original specification) or Izumi (USP 4,932,780).

The art is silent to the use of a carousel for containing the slide to interface with an analyzer.

Marker et al. teach the use of a carousel in an automated analyzer. The carousel has the advantages of providing immediate access to all of the samples, which enables "stat" analysis of an important sample. Automated analyzers have the additional advantages of reducing human error, lower labor costs and permit 24/7 operations.

It would have been within the skill of the art to modify Gagnon et al. (USP 5,764,355) in view of Eden et al., further in view of Applicants' admitted prior art (pages 3-8 of the original specification) or Izumi (USP 4,932,780) together further in view of Marker et al. and use a carousel engaged with an automated analyzer to gain the above advantages.

### ***Response to Arguments***

Applicant's arguments filed 2/27/06 have been fully considered but they are not persuasive.

Applicants' state the 2/27/06 and 12/2/05 Affidavits are sufficient to show commercial success of the instant invention. The Office has consulted MPEP section 716.01.

The Affidavit under 37 CFR 1.132 filed 12/2/05 and 2/27/06 are insufficient to overcome the rejection of the claims based upon 35 USC 103 as set forth in the last Office action because: The Affidavits fail to set forth facts.

It states that the claimed subject matter solved a problem that was long standing in the art. However, there is no showing that others of ordinary skill in the art were working on the problem and if so, for how long. In addition, there is no evidence that if persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references, they would still be unable to solve the problem. See MPEP § 716.04.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Applicants' state the instant specification is adequate clear what is intended by "precision optical polishing" and what type of polishing is excluded. Applicants' are encouraged to point to specific page and line numbers of the specification to support these positions. In the absence of specific citations, the Office maintains all of the rejections of record are proper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lyle A Alexander  
Primary Examiner  
Art Unit 1743